Ontario Ministry of Northern Development and Mines

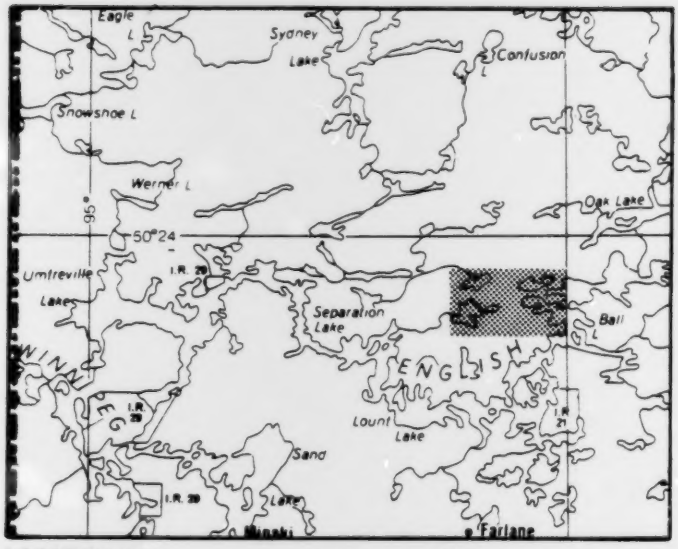
Mines and Minerals Division

ONTARIO GEOLOGICAL SURVEY

GEOLOGICAL DATA INVENTORY FOLIO 493

LENNAN LAKE AREA

Compiled by the Staff of
the Resident Geologist's Office
Kenora



LOCATION MAP Scale: 1:1 013 760 or 1 inch to 16 miles

CANADA ONTARIO Mineral Development Exploitation Minerals

This project is part of the five year Canada–Ontario 1985 Mineral Development Agreement (COMDA), a subsidiary agreement to the Economic and Regional Development Agreement (ERDA) signed by the governments of Canada and Ontario.

NTS Number 52 L/8 SE

Mining Claim Map Number G 2522 (M2692)

This project was funded under the Canada-Ontario Mineral Development Agreement (COMDA)

STATEMENT. This inventory is unedited. Discrepancies may occur for which the Ontario Geological Survey does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey 1990. Lennan Lake Area, Geological Data Inventory Folio 493; compiled by the staff of the Resident Geologist's office, Kenora.

Original Compilation by: A. Schottroff

Date	Page Revised	Revised by

Date	Page Revised	Revised by

CONVERSION FACTORS FOR MEASUREMENTS IN ONTARIO GEOLOGICAL SURVEY PUBLICATIONS

If the reader wishes to convert imperial units to SI (metric) units or SI units to imperial units the following multipliers should be used:

CONVERSION FROM SI TO IMPERIAL			CONVERSION FROM IMPERIAL TO SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
			LENGTH		
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
			AREA		
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
			VOLUME		
1 cm^3	0.061 02	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
			CAPACITY		
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
			MASS		
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 908 8**	t
			CONCENTRATION		
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy)/ton (short)	20.0	pennyweights/ton (short)
1 pennyweight/ton (short)	0.05	ounce (troy)/ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

NOTE–Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries published by The Mining Association of Canada in co-operation with the Coal Association of Canada.

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ACCOMPANYING MAPS

Property Location Map 1 Map

Exploration Data Map 1 Map

Map Scale 1: 31 680 or 1 inch to ½ mile

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no'; if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	YES	AS June/88
2	Assessment Files Research Office, Toronto		
3	ODM General Index; 9 volumes	YES	AS June/88
4	Catalogue of Airborne Geophysical Surveys (ODM)	YES	AS June/88
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	YES	AS June/88
6	ODM Industrial Mineral Reports	NO	AS June/88
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	NO	AS June/88
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	NO	AS June/88
9	Newspaper Clippings File	NO	AS June/88
10	GSC Index to Publications	YES	AS June/88
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	YES	AS June/88
12	OGS Index Maps	YES	AS June/88
13	Source Mineral Deposit Records (O.G.S.) and MDIR'S	YES	AS June/88
14	Author - Subject Articles File		
15	Miscellaneous Papers: ODM & OGS	YES	AS June/88
16	ODM Geological Circulars: OGS Study Series	NO	AS June/88
17	ODM Preliminary Reports: ODM Bulletins	YES	AS June/88
18	ODM – OGS Open File Reports	NO	AS June/88
19	OGS Northern Ontario Engineering Geology Terrain Studies	YES	AS June/88
20	OGS Aggregate Resources Inventory Papers	NO	AS June/88
21	OGS Mineral Potential Maps	YES	AS June/88
22	Theses on File, Kenora	NO	AS June/88
23	Aerial Photos on File, Kenora	NO	AS June/88
24	OBM Maps on File, Kenora	NO	AS June/88

Lennan Lake Area

METALS AND MINERALS REFERENCES LIST

- △ anh . . . . . Anhydrite
- △ ank . . . . . Ankerite
- △ anna . . . . . Annabergite
- △ ap . . . . . Apatite
- △ arg . . . . . Argentite
- △ As . . . . . Arsenic
- ▲ asp . . . . . Arsenopyrite
- △ asb . . . . . Asbestos
- △ ba . . . . . Barite
- △ be . . . . . Beryl
- △ Bi . . . . . Bismuth
- △ bn . . . . . Bornite
- △ bran . . . . . Brannerite
- △ bruc . . . . . Brucite
- △ Cd . . . . . Cadmium
- △ calc . . . . . Calcite
- △ carb . . . . . Carbonate
- △ cel . . . . . Celestite
- △ cc . . . . . Chalcocite
- ▲ cp . . . . . Chalcopyrite
- △ ch . . . . . Chert
- △ clay . . . . . Clay
- △ Co . . . . . Cobalt
- △ cob . . . . . Cobaltite
- △ cb . . . . . Columbite
- △ Cu . . . . . Copper
- △ cor . . . . . Corundum
- △ dol . . . . . Dolomite
- △ ep . . . . . Epidote
- △ ery . . . . . Erythrite
- △ fel . . . . . Feldspar
- △ fl . . . . . Fluorite (flurospar)
- △ fu . . . . . Fuchsite
- △ gn . . . . . Galena
- ▲ gt . . . . . Garnet
- △ goe . . . . . Goethite
- ▲ Au . . . . . Gold
- △ gf . . . . . Graphite
- △ gl . . . . . Gravel
- △ gyp . . . . . Gypsum
- △ hem . . . . . Hematite
- △ il . . . . . Ilmenite
- △ Fe . . . . . Iron
- △ IF . . . . . Iron Formation
- △ jas . . . . . Jasper
- △ kaol . . . . . Kaolinite (kaolin)
- △ ky . . . . . Kyanite
- △ Pb . . . . . Lead
- △ lim . . . . . Limonite
- △ Li . . . . . Lithium
- △ mgst . . . . . Magnesite
- ▲ mag . . . . . Magnetite
- △ mc . . . . . Malachite
- △ Mn . . . . . Manganese
- △ mb . . . . . Marble
- △ mar . . . . . Marcasite
- △ ma . . . . . Marl
- △ mi . . . . . Mica
- △ ml . . . . . Millerite
- △ mo . . . . . Molybdenite
- △ Mo . . . . . Molybdenum
- △ mon . . . . . Monazite
- △ ne . . . . . Nephelite (nepheline)
- △ nc . . . . . Niccolite
- △ Ni . . . . . Nickel
- △ Nb . . . . . Niobium
- △ Pd . . . . . Palladium
- △ peat . . . . . Peat
- △ pent . . . . . Pentlandite
- △ Pt . . . . . Platinum
- ▲ py . . . . . Pyrite
- △ pyl . . . . . Pyrochlore
- △ pyrl . . . . . Pyrolusite
- ▲ po . . . . . Pyrrhotite
- △ q . . . . . Quartz
- △ qcv . . . . . Quartz carbonate vein
- △ ra . . . . . Radioactive minerals
- △ RE . . . . . Rare Earths
- △ sd . . . . . Sand
- △ sgl . . . . . Sand and gravel
- △ ss . . . . . Sandstone
- △ scap . . . . . Scapolite
- △ shee . . . . . Scheelite
- △ serp . . . . . Serpentine
- △ sh . . . . . Shale
- △ sid . . . . . Siderite
- △ si . . . . . Silica
- △ Ag . . . . . Silver
- △ sl . . . . . Slate
- △ sm . . . . . Smaltite
- △ sod . . . . . Sodalite
- △ spec . . . . . Specularite
- △ sp . . . . . Sphalerite
- △ spd . . . . . Spodumene
- △ staur . . . . . Staurolite
- △ stib . . . . . Stibnite
- △ st . . . . . Stone
- △ talc . . . . . Talc
- △ Te . . . . . Tellurium
- △ td . . . . . Tetrahedrite
- △ th . . . . . Thorite
- △ Th . . . . . Thorium
- △ thuc . . . . . Thucholite
- △ ti . . . . . Titanite
- △ Ti . . . . . Titanium
- △ tour . . . . . Tourmaline
- △ trap . . . . . Trap rock
- △ W . . . . . Tungsten
- △ uran . . . . . Uraninite
- △ U . . . . . Uranium
- △ verm . . . . . Vermiculite
- △ Y . . . . . Yttrium
- △ Zn . . . . . Zinc
- △ zr . . . . . Zircon

Solid triangles indicate metal and mineral occurrences shown on the accompanying maps or mentioned within either Drillhole Summary or Mineral Occurrences.

Lennan Lake Area

MINERAL OCCURRENCES

Map Ref. Letter	Name(s)	Mineralization	Source Mineral Deposit Record	References in OGS Mineral Deposits Circulars & OGS Industrial Mineral Reports	Additional References and/or Remarks
A	Helder Lake Sulphide Occurrence	py,po,mag, asp,cp,gt,Au	NMI 52L AU9	MRC 11, p.209	7 diamond drill holes and 5 trenches located on a map with accompanying report by Robert Thompson, Resident Geologist, Kenora, Sept. 25, 1947; found in Kenora Mineral Deposits File, 52L/8 SE, Helder Lake Occ.

Lennan Lake Area

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
COMPANY/AUTHOR (file number)																				
1	Harry Hawes				47															
2	Juma Mining & Exploration Ltd. 52L/8 SE B-1	57				57		57/58												
3	Shabu Gold Mines Ltd. 52L/8 SE C-1											87	87							

GDIF FORM NO. 2

Lennan Lake Area

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole	Thickness of Overburden	Total Length of Hole (feet)	Mineralization Noted in Log	Assay Data Included for
1	Harry N. Hawes	DDH 1	1947	SE	-60°		80		
2	Harry N. Hawes	DDH 2	1947	SE	-40°		110		
2	Harry N. Hawes	DDH 3	1947		-90°		100		
2	Harry N. Hawes	DDH 7	1947	N	-45°		115		
2	Harry N. Hawes	DDH 8	1947	SE					
3	Harry N. Hawes	DDH 4	1947	N	-30°		80		
4	Harry N. Hawes	unnamed	1947	N	-50°				

GDIF FORM NO. 3

Lennan Lake Area

AIRBORNE GEOPHYSICAL SURVEY DATA

No.	By / For	Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing
	No surveys on file as of June 8,	1988			

GDIF FORM NO. 4

Lennan Lake Area

GEOCHEMICAL SURVEY DATA

Map Sample Site Reference Number	Type of Survey	Analysis For	By	Reference
	No surveys on file as of June 8, 1988			

GDIF FORM NO. 5

MISCELLANEOUS DATA

AGE DATING

Site	Method	Material	Reference	Result
	No age dating on file as of June 8, 1988			

GDIF FORM NO.6

NEWSPAPER CLIPPINGS FILE

NOTE: A file of newspaper clippings about the companies listed below, who have worked in this area, is maintained in the Regional/Resident Geologist's Office.

No newspaper clippings on file pertaining to the Lennan Lake Area as of June 8, 1988

ODM GENERAL INDEX SEARCH

Words searched: Ball Lake, Beauty Lake, Derry, D.R., Dumpy Lake, Gold, Hagar, Andy, Harrison, Patrick, Hawes, Harry N., Helder Lake, Iron Formation, Juma Mining and Exploration Limited, Lennan Lake, Rose, Kenneth C., Scenic Lake, Scotty Lake, Tide Lake, Uranium, Shabu

Index Volume	Listing:	Report Volume	Part	Page
1	Tide Lake, English River, Kenora	N.O.		255
2	Ball Lake, English River, Kenora	33	IV	1-11
	with		map	33f
2	Tide Lake, English River, Kenora	33	IV	1,2
	Ancient buildings near			
	Report on country between, and Lac Seul			
3	Derry, D.R., Report by, on:	39	3	24-41
	Minaki-Sydney Lake area			
3	Lennan Lake, North of Lount Lake			
	Rocks	39	3	29
	Sand Deposits	39	3	37
6	Juma Mining and Exploration Ltd. Incorporated	67	1	31
8	Helder Lake Occurrence			
	Helder Lake Area, Kenora-Patricia District	MRC 11		209
9	Helder Lake, Separation Lake Area	MP72		31
	Kenora-Patricia District			

GDIF FORM NO. 8

Lennan Lake Area

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		REGIONAL COMPILATION MAPS		
Ayres, L.D., Lumbers, S.B., Milne, V.G., Robeson, D.W.	1970	Ontario Geological Map, West Central Sheet	ODM Map 2199	1" to 16 miles
Beakhouse, G.P.	1980	Geology, Winnipeg River-English River Area, Manitoba and Ontario, map and notes	GSC Open File 652	1:125,000
Breaks, F.W., Bond, W.D., McWilliams, G.H., Gower, C.F., Stone, D.	1975	Operation Kenora-Sydney Lake, Oak-Indian Lakes Sheet, District of Kenora	ODM Map P. 1029	1" to 1 mile (1:63,360)
Davies, J.C., Pryslak, A.P.	1966	Lower English River Sheet, District of Kenora Geological Compilation Series	ODM Map P.366	1" to 2 miles (1:126,720)
Ferguson, S.A., Brown, D.D. Davies, J.C., Pryslak, A.P.	1968	Red Lake-Birch Lake Sheet, Geological Compilation Series	ODM Map 2175	1" to 4 miles (1:253,440)
Tanton, T.L.	1939	Canada Dept. of Mines and Resources, Kenora Sheet, Ontario	Map 266A	1" to 8 miles (1:506,880)
Thurston, P.C. Barlett, J.R.	1981	Lower English River Sheet, Patricia Kenora District, (revision of Map P.366)	OGS Map P. 2394	1" to 2 miles (1:126,720)
		GEOPHYSICAL MAPS		
Dept. of M & NR, Manitoba, Dept. of EMR, GSC and ODM	1965	Pointe du Bois Manitoba-Ontario Airborne Magnetic Survey, Aeromagnetic Series (with Geophysics Paper 7124)	Map 7124G	1:250,000
Dept. of MR & E, Manitoba, MNR Ontario and EMR, GSC	1977	Federal-Provincial Uranium Reconnaissance Program Airborne Gamma-Ray Spectrography Pointe du Bois Area	36252G-1-6	1:250,000

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		GEOPHYSICAL MAPS		
Geo-Analysis (1981) Ltd.	1981	The Identification of Structural Linears from Landsat Imagery in Northwestern Ontario. Energy, Mines and Resources Canada, Earth Physics Branch, Seismological Service of Canada	OF 82-12, Map 1 Image 3125	1:250,000
Gravity & Geodynamics Division	1981	Gravity Map of Canada, 1980, Lake of the Woods, Earth Branch, Energy, Mines and Resources Canada	Map No.48090	1:1,000,000
G.S.C.	1984	Radioactivity Map, Lake of the Woods -Contour Maps: Ur(TC),eU,eTh,%K,eU/eTh,eU/K,eTh/K	OF 1067, Map 36252G	1:1,000,000
Hall, D.H., Coles, R.L., Hall, J.M.	1979	Distribution of Induced Intensity of Magnetization in Southeastern Manitoba and Northwestern Ontario	GSC OF 654	
ODM & GSC	1961	Aeromagnetic Series, Lennan Lake, Kenora District Ontario	Map 1181G	1" to 1 mile (1:63,360)
ODM & GSC	1965	1961 Aeromagnetic Survey Composite Map	P.279	1" to 16 miles (1:1,013,760)
OGS-GSC	1977	Uranium Reconnaissance Program Airborne Gamma-Ray Spectrometer Survey -Contour Maps: TC,K,eU,eTh,eU/eTh,eU/K,eTh/K -Flight Line Profiles	P.1320-1354	1:250,000
		SURFICIAL, PLEISTOCENE, TERRAIN ENGINEERING		
Jenkins, G.C., Hoffman, D.W Smith, R.E., Zoltai, S.C.	1975	Canada Land Inventory, Soil Capacity for Agriculture, Pointe du Bois Sheet	No. En 64/2-52L	1:250,000
MNR, Ontario	1970	Ontario Land Inventory, Aggregate, Pointe du Bois Sheet	OLI 52L	1:250,000
Zoltai, S.C.	1965	Kenora-Rainy River Surficial Geology	ODL & F Map S165	1" to 8 miles (1:506,880)
Neilson, J.M.		Northern Ontario Engineering Geology Terrain Study, Data Base Map, Umfreville Lake (Not Released)	OGS Map 5106	1:100,000

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		MINERAL POTENTIAL MAPS		
Robertson, J.A.	1982	Uranium and Thorium Deposits of Ontario, West Central Sheet; Mineral Deposits Series	OGS Map P.2427	1" to 16 miles (1:1,013,760)
Springer, Janet	1978	Ontario Mineral Potential, Point du Bois Sheet, District of Kenora Mineral Deposits Series	OGS Map P.1539	1:250,000
		GEOLOGICAL REPORTS AND MAPS		
Bell, R.	1873	Report on the Country Between Lake Superior and Lake Winnipeg	GSC Report of Progress, 1872-1873, pt.5	
Breaks, F.W., Bond, W.D., Stone, D.	1978	Preliminary Geological Synthesis of the English River Subprovince, Northwestern Ontario, and Its Bearing Upon Mineral Exploration	OGS MP 72 with Map P. 1971	55 pp. 1" to 4 miles (1:253,440)
Bruce, E.L.	1924	Geology of the Upper Part of the English River Valley	ODM Vol. 33, pt.4 with Map No. 33F	p. 1-11 1" to 2 miles (1:126,720)
Davis, E.J.	1901	Report of the Survey and Exploration of Northern Ontario, 1900	N.O.	294 pp.
Derry, D.R.	1930	Minaki to Sydney Lake	ODM Vol. 39, pt.3 with Map 39G	p. 24-41 1" to 3 miles (1:190,080)
Kelly, T.J.	1959	Statistical Review of the Mineral Industry for 1957	ODM Vol.67, pt.1	p. 31
Selwyn, A.R.C.	1873	Notes on a Preliminary Geological Reconnaissance from Lake Superior by the English and Winnipeg Rivers to Fort Garry	GSC Report of Progress, 1872-1973, pt. 2	

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		GEOLOGICAL REPORTS AND MAPS (cont'd)		
Shklanka, Roman	1968	Iron Deposits of Ontario	OGS MRC 11	p. 209

NOTES AND ADDENDA

AERIAL PHOTOGRAPHY INDEX

(compiled from index maps only)

Scale 1" to 1/4 mile

1983	Roll Number	Photo Number
	83-4	182-194
	83-4	42-54
	83-5	47-59
	83-6	46-58
	83-6	128-140
	83-21	261-273
1976	76-7	15-28
	76-7	108-120
	76-8	95-109
	76-27	155-168
	76-29	195-208
	76-31	109-121

Scale 1" to 1 mile

	Flight Line	Photo Number
1953	A 13788	65-69
	A 13788	115-119

TOPOGRAPHIC MAPS

1976, Surveys and Mapping Branch
Department of EMR, Ottawa
Lennan Lake, 52L/8 — 1:50,000*

1984, Surveys and Mapping Branch
MNR, Toronto, Provincial Series
Umfreville Lake, 52L/SE and Part of 52L/SW — 1:100,000*

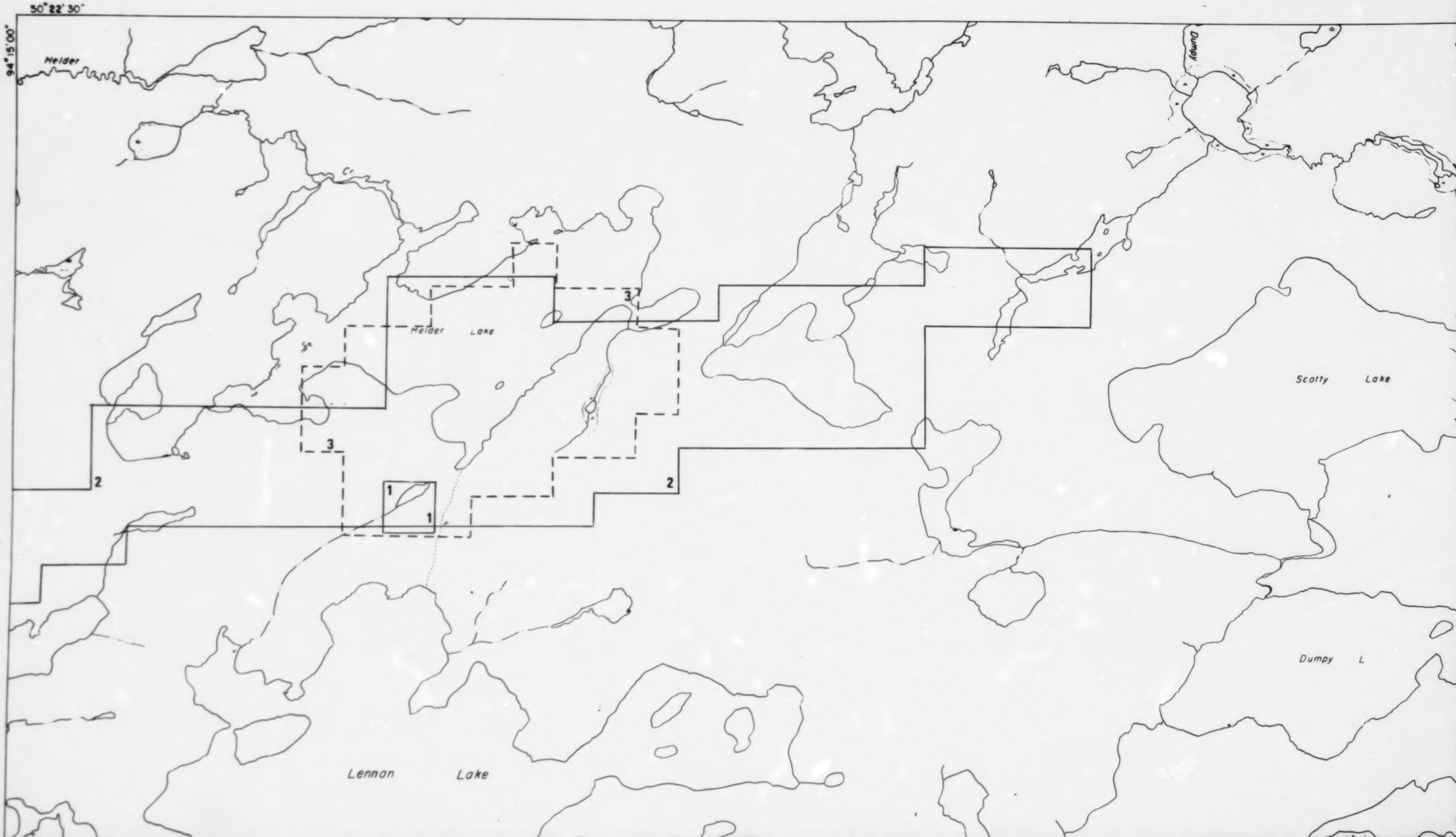
1978, Surveys and Mapping Branch
Department of EMR, Ottawa
Pointe du Bois — 1:250,000*

*Published maps currently on file in Resident Geologist's Office, Kenora

MINERAL DEPOSITS FILE

Note: A deposits file is maintained at the Kenora Resident Geologist's Office which contains the published data on the following mineral deposit:

1. Helder Lake


50°22'30"
94°15'00"
Helder
Dumpy
Helder LAKE
Scotty Lake
Dumpy L
Lennan Lake
1
2
3

Ministry of Northern Development and Mines

Mines and Minerals Division

Ontario

ONTARIO GEOLOGICAL SURVEY

PROPERTY LOCATION MAP

GEOLOGICAL DATA INVENTORY FOLIO 493

(Map 1 of 2)

LENNAN LAKE AREA

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

Lennon Lake

Dumpy L

Beauty L

Scenic L

Indian L

94° 15' 00"

30° 15' 00"

Dumpy L

Ball Lake

Ball L

Indian L

English R

94°00'00"

50°15'00"

EXPLORATION DATA FILE AREAS

- Reference number is always inside work area outlined. See listing in text pages.
- Small area of exploration
- File covers whole township or area

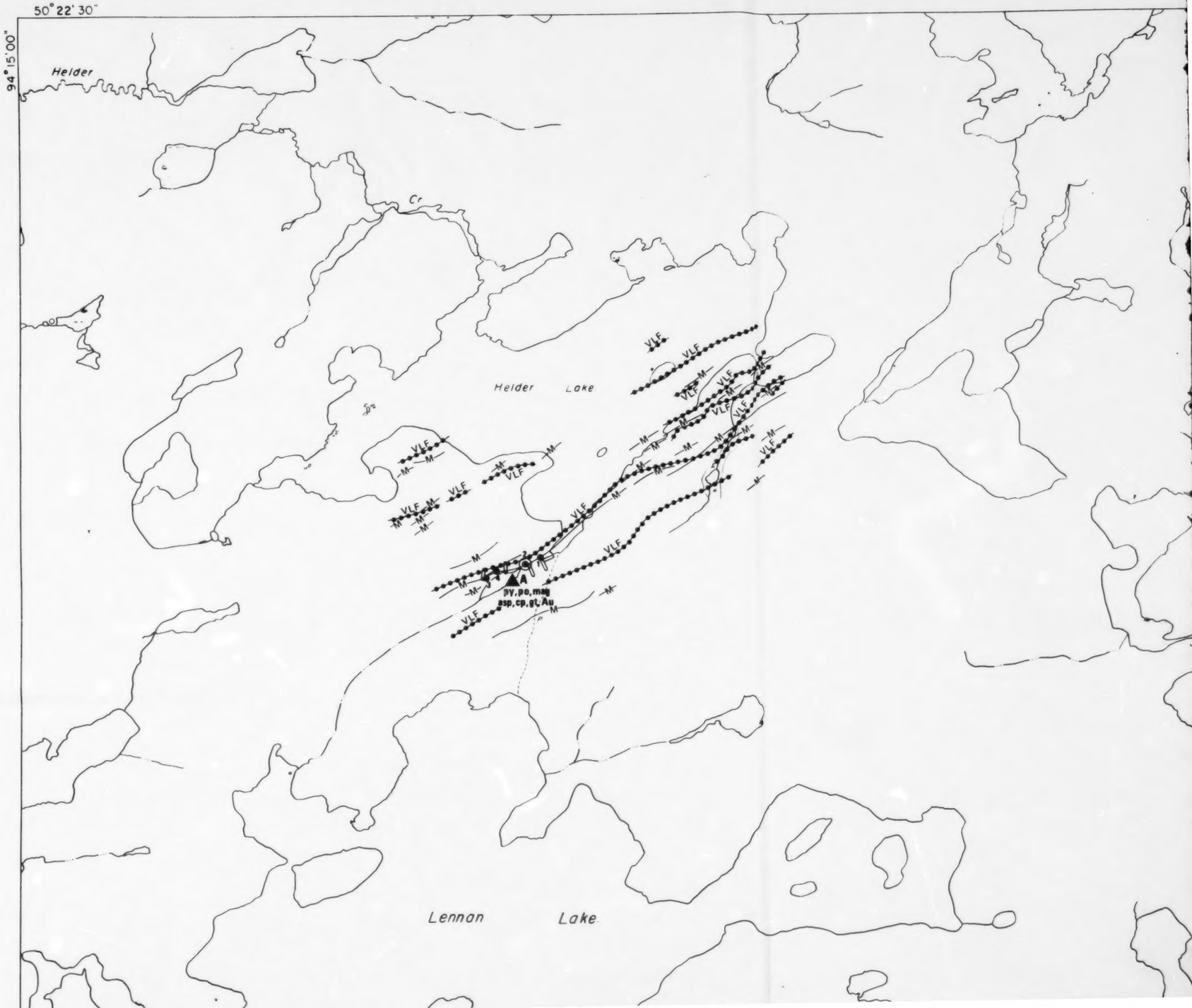
TYPES OF DATA SHOWN ON THIS MAP

GEOCHEMICAL AND GEOCHRONOLOGICAL DATA

- ☐ ◆³ Geochemical sample site, with reference number
- ☐ ◆³ Area of geochemical sampling, with reference number
- ☐ ✳² Age dating material sampling site, with reference number

GEOPHYSICAL ANOMALIES

- ☐ —AM— Airborne magnetic anomaly
- ☐ Airborne electromagnetic anomaly Length of anomaly along flight line
- ☐ Airborne electromagnetic anomaly Location of anomaly along flight line
- ☐ Airborne electromagnetic anomaly Conductor axis: definite, probable, possible
- ☐ —ARA— Airborne radiometric anomaly
- ■ —M— Ground magnetic anomaly
- ■ —VL— Ground electromagnetic anomaly (VL - Vertical loop; HL - Horizontal loop VLF - Very low freq.; Turam; JEM - Crone Em - 16)
- ☐ —RA— Ground radiometric anomaly
- ☐ —IP— Induced polarization anomaly
- ☐ —SP— Self potential anomaly
- ☐ —AFMAG— Audio-frequency magnetic anomaly (total intensity)



Helder Lake

Scotty Lake

Tide Lake

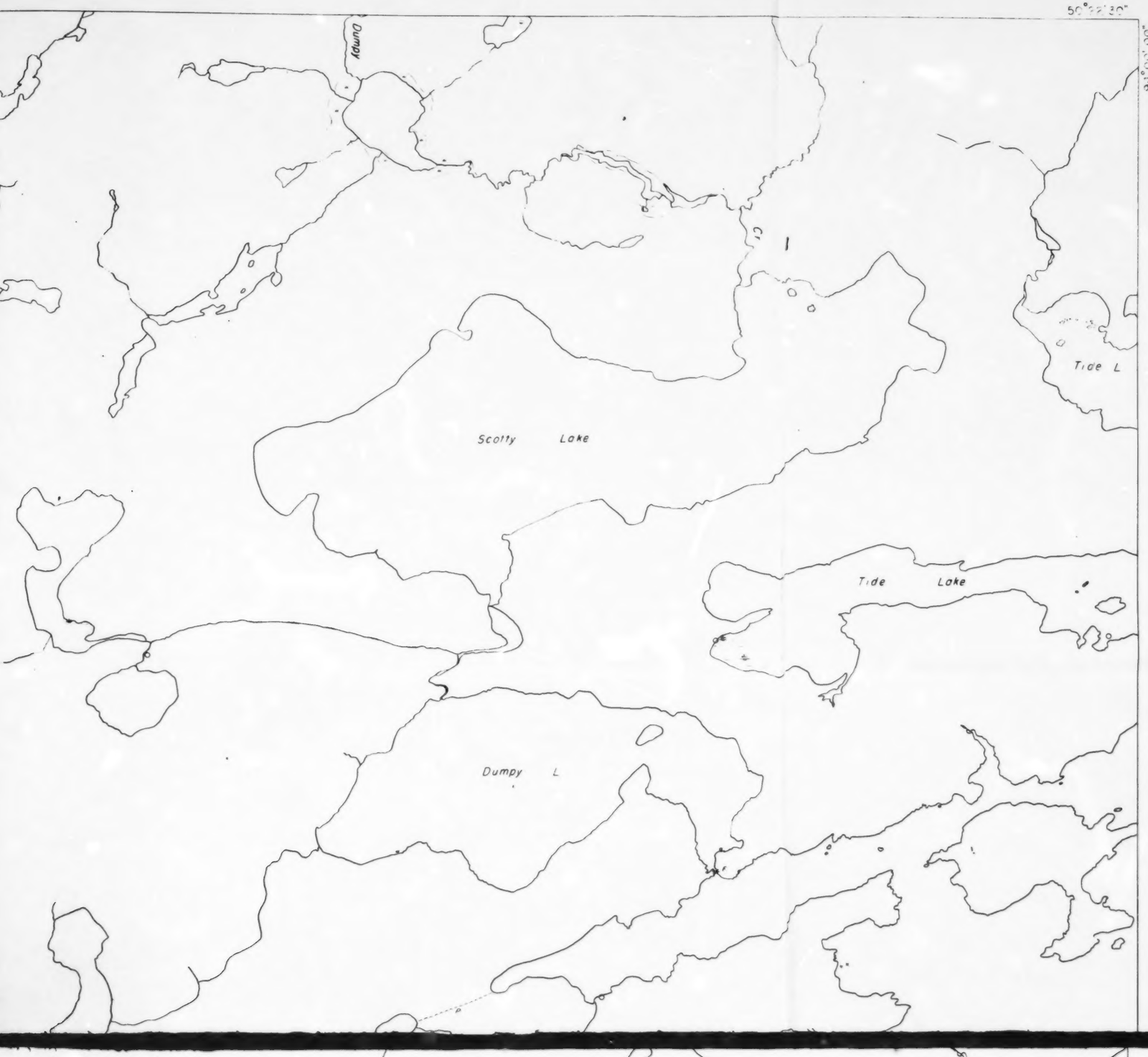
Dumpy L

Lennon Lake

VLF

M

py, po, mag
sp, cp, gl, Au



Ministry of Northern Development and Mines

Mines and Minerals Division

Ontario

ONTARIO GEOLOGICAL SURVEY

EXPLORATION DATA MAP

GEOLOGICAL DATA INVENTORY FOLIO 493

(Map 2 of 2)

LENNAN LAKE AREA

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

GEOLOGICAL AND MINING SYMBOLS

TYPES OF DATA SHOWN ON THIS MAP

MINERAL OCCURRENCES

- ☐ cp ▲ A. — Mineral occurrence at surface, with reference letter
- ☐ Au ◪ A. 84' — Mineral occurrence with shaft, depth given with reference letter
- ☐ Ag △ A. — Mineral occurrence reported but exact location uncertain, with reference letter
- ☐ cp ▬ A. — Mineralized float with reference letter

■ —M— Ground magnetic anomaly

■ —VL— Ground electromagnetic anomaly
(VL - Vertical loop; HL - Horizontal loop
VLF - Very low freq.; Turam; JEM -
Crone Em - 16)

□ —RA— Ground radiometric anomaly

□ —IP— Induced polarization anomaly

□ —SP— Self potential anomaly

□ —AFMAG— Audio-frequency magnetic anomaly
(total intensity)

□ —R— Resistivity anomaly

□ —GR— Gravity anomaly

MISCELLANEOUS DATA

■ Trenching, pit

□ Adit

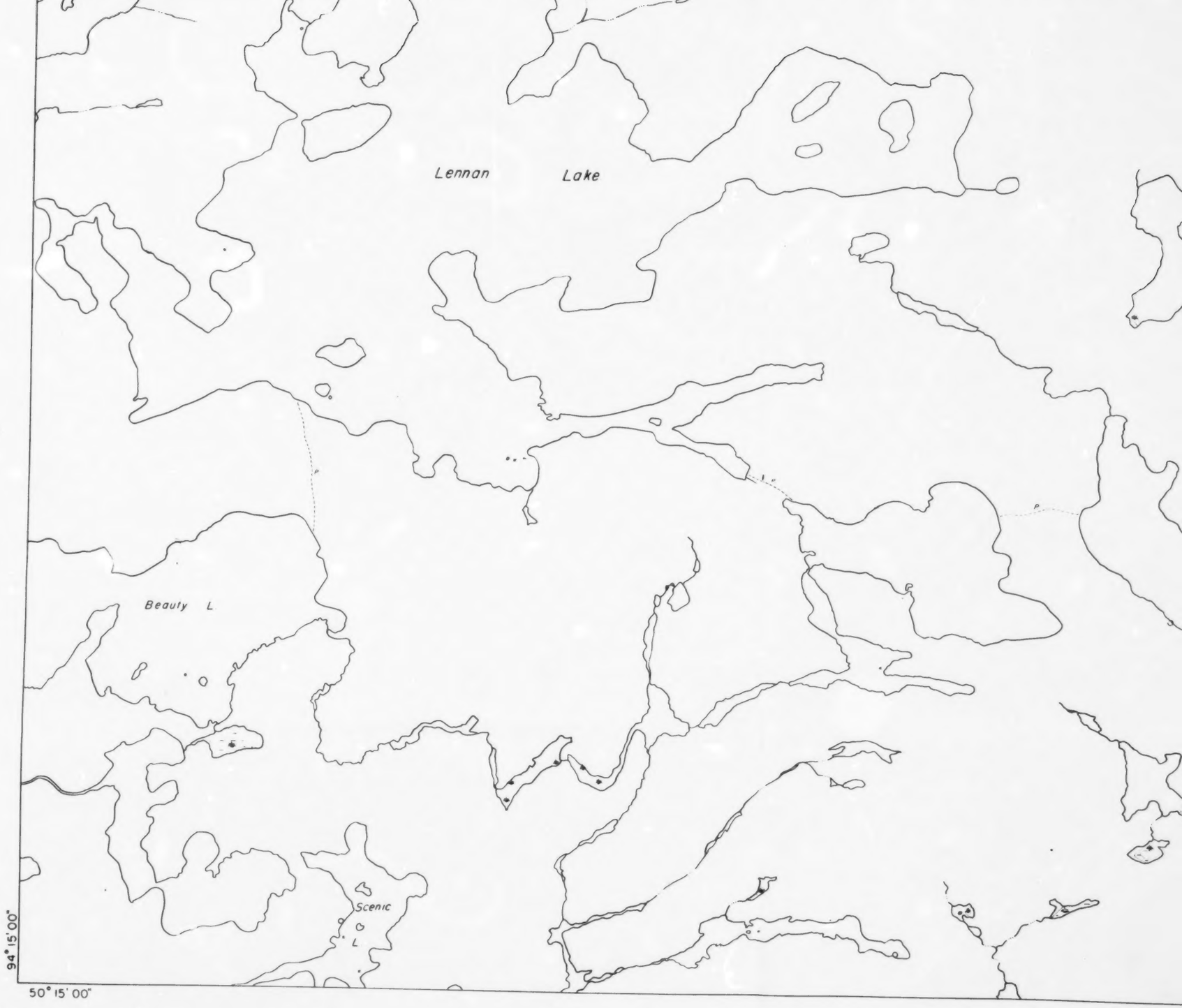
□ Open pit

□ Rock quarry

□ Sand and/or gravel pit

□

NOTE: Consult the text that accompanies this map for pertinent lists of data, references, and abbreviations.



Lake

Dumpy L

Ball Lake

Ball L

Indian L

English R

94°00'00"

50°15'00"

TYPES O

cp

Au

Ag

cp

GEOLOGICAL AND MINING SYMBOLS

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MINERAL OCCURRENCES

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- ☐ Ag A. — Mineral occurrence reported but exact location uncertain, with reference letter
- ☐ cp A. — Mineralized float with reference letter
- ☐ A. — Mineral occurrence in drillhole, with reference letter, and drillhole number

DRILLHOLES

- ■ ●² — Location of single drillhole, with reference number
- ■ ◎² — Location of closely spaced group of drillholes, with reference number
- ☐ ?² — Drillhole, exact location uncertain, with reference number
- ☐ — Property with underground drillholes in this general area with reference number
- ☐ ○² — Property with drillholes which have not been plotted on map, with reference number
- ☐ ⊕² — Reverse circulation drillhole; churn drilling, with reference number